

Notice of Allowability

Application No.

09/523,332

Examiner

Allen Wong

Applicant(s)

MOCHIDA ET AL.

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/21/07.
2. ☒ The allowed claim(s) is/are 1,2,4,5,7,9-16,18,20-22 and 37-40, renumbered as claims 1-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


Allen Wong
Primary Examiner
Art Unit 2621

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 2, 4, 5, 7, 9-16, 18, 20-22 and 37-40 are allowed.
2. The following is an examiner's statement of reasons for allowance: The prior art does not specifically disclose the specific combination of limitations of claim 1: an endoscopic imaging system comprising: an endoscope having an insertion unit which is insertable into an object, the insertion unit having an illumination optical system for illuminating the object and an objective optical system for forming an optical image of the illuminated object; an imaging apparatus having an imaging device for picking up the optical image and outputting an image pick-up signal; a camera control unit connected to the imaging apparatus, the camera control unit comprising a synchronizing signal generation circuit for generating a synchronizing signal, and a video signal processing circuit for processing the image pick-up signal at a predetermine timing based on the synchronizing signal, to generate a video signal; and a connector associated-with for connecting the imaging apparatus and the camera control unit, the connector being provided to the imaging apparatus and electrically connected to the imaging device via an elongate signal transmission line, the connector including: a timing signal generation circuit for generating a periodic timing signal according to the type of the imaging device; a sampling circuit for sampling the image pick-up signal at a predetermined sampling timing according to the timing signal, and outputting the sampled image pick-up signal to the video signal processing circuit; a phase delay circuit for delaying the phase of the timing signal by a delay amount according to the

length of the signal transmission line; and an imaging device drive circuit for generating a drive signal to drive the imaging device and inputting the generated drive signal to the imaging device based on the timing signal, the phase of which has been delayed by the phase delay circuit. Similarly, the prior art does not specifically disclose the combination of limitations of claims 18 and 22, and thus, claims 18 and 22 are patentable.

3. Also, the prior art does not specifically disclose the combination of limitations of claim 37: an image apparatus comprising: an imaging device having an imaging device for picking up an image of an object and generating an image pick-up signal; and a connector electrically connected to the imaging device via an elongate signal transmission line, the connector including: a timing signal generation circuit for generating a periodic timing signal according to the type of the imaging device; a sampling circuit for sampling the image pick-up signal at a predetermined sampling timing according to the timing signal; a phase delay circuit for delaying the phase of the timing signal by a delay amount according to the length of the signal transmission line; and an imaging device drive circuit for generating a drive signal to drive the imaging device and inputting the generated drive signal to the imaging device based on the timing signal, the phase of which has been delayed by the phase delay circuit wherein the sampling circuit performs the sampling at a timing of a constant phase relation with respect to the image pick-up signal even when the length of the signal transmission line is different.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Terminal Disclaimer

4. The terminal disclaimer filed on 7/17/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 5,178,130 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

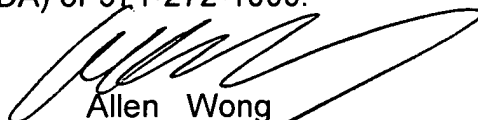
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Wong
Primary Examiner
Art Unit 2621

AW
12/19/07